



CUSTOMER STORIES

PERFECTING GASTIGHT WELDS FOR THIN-WALLED APPLICATIONS SUCH AS EXHAUST PIPES AND HOSES



Our brazing rings make it faster, easier, and more reliable to achieve superior welds across demanding vehicle applications

CHALLENGE

Creating cleaner, more rugged exhaust systems for heavy-duty commercial vehicles demands reliable welded connections—even in thin-walled pipes and hoses (e.g. down to 1.5 mm). Achieving “zero leakage” objectives within high-vibration, high-temperature applications means the integrity of each weld is critical. At the same time, it is important to support efficient manufacturing, cost, and supply chain needs as well.

SOLUTION

For major manufacturers of metal hoses, gastight hoses (GTH) and pipes for gas/exhaust applications, Isabellenhütte supplies standard and customized flux-free brazing alloy wires—in various shapes (e.g. rings)—designed to ensure peak performance in the joining and coating of any steels, nickel alloys, and hard metals. In strenuous off-road environments, it is essential that welded connections withstand constant vibration and torque challenges, including relative movements between a truck’s cab and chassis. Our ability to custom-create brazing solutions from our ISA-BRAZE® alloy allows for unwavering performance at temperatures up to 300°C/570°F.

APPLICATION

Gastight hoses; exhaust assemblies for trucks, busses, and construction equipment